

CLAIMS

1. A method for manufacturing a tissue section, which is used for a sample for observation by a microscope, comprises the steps of slicing an organism specimen, whose form has been fixed by freezing or by using an embedding agent, along a slicing surface, characterized by:

adjusting a distance between the slicing surface of the organism specimen and one side of a film and a temperature difference between the organism specimen and the film when the slicing of the organism specimen is started, thereby a tip part of the tissue section curling to the outside of the slicing surface of the organism specimen is allowed to adhesively abut on one side of the film running apart from the slicing surface of the organism specimen; and

running the film at a speed in synchronism with a slicing speed of the tissue section after the tip part of the tissue section is allowed to adhesively abut on the one side of the film, thereby the entire tissue section cut off from the organism specimen can be adhered onto the one side of the film.

2. The method according to claim 1, wherein the temperature difference between the organism specimen and the film is adjusted by adjusting temperature of the film and/or temperature of an atmosphere, in which the organism specimen is sliced.

3. The method according to claim 1, wherein temperature of the film is adjusted to temperature, at which a part of an ice or the embedding agent for fixing the form of the organism specimen melts and the tissue section is adhered onto the film.

4. The method according to claim 1, wherein temperature of an atmosphere, in which the organism specimen is sliced, is adjusted so as to hold the fixed form

of the organism specimen.

5. The method according to claim 1, wherein a plurality of rollers including a close roller, which is provided nearest to the slicing surface of the organism specimen, are provided in a film running path, and the distance between the slicing surface of the organism specimen and the one side of the film is adjusted by moving the close roller to and away from the slicing surface of the organism specimen.

6. The method according to claim 5, wherein a center of the close roller is moved on a bisector line of an intersection angle between a line extended from a cutting surface of a cutting tool, which intersects a line extended from the slicing surface of the organism specimen, and the line extended from the slicing surface of the organism specimen.

7. The method according to claim 1, wherein the film running speed with respect to the slicing speed of the tissue section is adjusted so as not to form creases in the tissue section and break the tissue section.

8. The method according to claim 1, wherein ratio (V_t/V_s) of the film running speed (V_t) to the slicing speed (V_s) of the tissue section is 1.2-0.8.

9. The method according to claim 1, wherein the film is a transparent film.

10. A device for manufacturing a tissue section, which is used for a sample for observation by a microscope, comprising: means for slicing an organism specimen, whose form has been fixed by freezing or by using an embedding agent, along a slicing surface; and means for running a film apart from the slicing surface of the organism specimen, characterized by:

means for adjusting a distance between the slicing surface of the organism specimen and one side of the film so as to make a tip part of the curling tissue section contact with the outside of the slicing surface of the organism specimen when the slicing of the organism specimen is started;

means for adjusting temperature between the organism specimen and the film so as to make the tip part of the tissue section, which has been contacted the outside of the film, adhesively abut on the film; and

means for synchronizing a slicing speed of the tissue section, whose tip part has been adhered on the one side of the film, and a running speed of the film so as to adhere the entire tissue section cut off from the organism specimen onto the one side of the film.

11. The device according to claim 10, wherein said temperature adjusting means adjusts temperature of the film and/or temperature of an atmosphere, in which the organism specimen is sliced.

12. The device according to claim 10, further comprising means for adjusting temperature of the film to temperature, at which a part of an ice or the embedding agent for fixing the form of the organism specimen melts and the tissue section is adhered onto the film, said temperature adjusting means being provided in a film running path.

13. The device according to claim 10, further comprising means for adjusting temperature of an atmosphere, in which the organism specimen is sliced, so as to hold the fixed form of the organism specimen.

14. The device according to claim 10, wherein said distance adjusting means has a plurality of rollers, which are provided in a film running path and which include a close roller provided nearest to the slicing surface of the organism

specimen, and the close roller is capable of moving to and away from the slicing surface of the organism specimen.

15. The device according to claim 14, wherein a center of the close roller is moved on a bisector line of an intersection angle between a line extended from a cutting surface of a cutting tool, which intersects a line extended from the slicing surface of the organism specimen, and the line extended from the slicing surface of the organism specimen.

16. The device according to claim 10, wherein said synchronizing means has a control section, which controls said running means and said slicing means to adjust the film running speed with respect to the slicing speed of the tissue section so as not to form creases in the tissue section and break the tissue section.

17. The device according to claim 16, wherein the control section controls said running means and said slicing means so as to make ratio (V_t/V_s) of the film running speed (V_t) to the slicing speed (V_s) of the tissue section 1.2-0.8.

18. The device according to claim 10, wherein the the film is a transparent film.